

To: Smith, Terry[Smith.Terry@epa.gov]
From: Garrahan, Kevin
Sent: Wed 8/12/2015 1:10:27 PM
Subject: FW: PALs

FYI. I'm be down to EOC in 5 minutes.

Kevin

From: Choudhury, Harlal
Sent: Wednesday, August 12, 2015 9:01 AM
To: Garrahan, Kevin
Cc: Sayles, Gregory; Taft, Sarah; Koglin, Eric
Subject: RE: PALs

As listed in the PAL table:

Arsenic:

Oral (mg/L)

	24Hr	30 day	90 day	2yr.
PAL 1	3.5	1.0	0.84	0.14
PAL2	4.7	1.9	1.3	0.42
PAL3	140	4.2	NR	0.8

Inhalation:

PAL1: - NR-----

PAL2	0.11	0.021	NR	NR
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PAL3	0.32	0.063	NR	NR
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We do not have values for other metals like lead, cadmium, zinc.

LEAD; EPA recommends IEUBK model for Lead

Zinc: Available in IRIS

Hope this will help.

Thanks Kevin

Harlal

From: Garrahan, Kevin
Sent: Tuesday, August 11, 2015 5:11 PM
To: Choudhury, Harlal
Cc: Sayles, Gregory; Taft, Sarah; Koglin, Eric
Subject: PALs

Harlal,

I'm working in EPA's Emergency Operations Center (EOC) providing technical support on the Gold King Mine/Animas River toxic sludge spill in Colorado. Quick question for you -- Do we have any PALs for the following chemicals of concern:

1. Lead
2. Arsenic
3. Aluminum
4. Cadmium
5. Lead
6. Thallium
7. Zinc

I would be surprised if we had PALs for any of these, but would appreciate you double checking. Thanks!

Kevin